From: Benjamin Shorr
To: Eric Blischke/R10/USEPA/US@EPA
Cc: Jay Field; Robert Neely
Subject: Re: [Fwd: first cut at spatial/graphical depiction of benthic risk]
Date: 03/14/2007 05:15 PM

Eric-

The grid is targeted for 0.4 acres per cell- which is about 132' per side (17,000 ft2). That's 40 cells per river mile, with slightly different size/shapes as the rivers direction changes (generally at river mile divisions). This size is not set in stone by any means- however I iteratively created grid cells in an attempt to create a unit that is larger than a FS level potential dredge unit but small enough to resolve data gaps without creating a false appearance of data. I envision the aggregation of cells based on actual sample locations that fall within the cell and logical proximate cells into AOPCs. This approach is really the same concept for modeling cells as a surface water or sediment transport modeling construct.

You can use this in any way you can imagine- that is you could code cells w/o data in a decision matrix that dictates that 1 cell buffer is considered the same as an adjacent cell, or cells that contain multiple points are considered well classified--- you can also identify cells on the boundaries of "coded" cells for data gap purposes. There will likely be some best professional judgement in interpreting areas where data was collected in a dense manner.

Additionally, this will highlight areas where benthic toxicity was "correlated" into nothing by the LWG's process...

We're working on using this to evaluate the toxicity data and aid in the identification of data gaps-

Ben

Blischke.Eric@epamail.epa.gov wrote:

> At first glance, this looks like an appealing way to look at results - a
> couple of questions though - how did you come up with the grid size, and
> for the establishment of AOPCs, how do we interpolate between areas were
> we do not have samples?
>
> Eric
>
> Benjamin Shorr <Benjamin.Shorr@noaa.gov>
> To: Eric Blischke/R10/USEPA/US@EPA
> 03/14/2007 02:00 PM
> cc: Robert Neely <Robert.Neely@noaa.gov>, Jay Field <Jay.Field@noaa.gov>, Blischke/R10/USEPA/US@EPA
> Eric

Subject [Fwd: first cut at spatial/graphical depiction of benthic risk]

Eric-

This is kind of messy- but the grid is our basic attempt at a rationale approach for evaluating the eco benthic risk line of evidence to inform data gaps and also to move forward with our understanding of how well the site is characterized. The boxes are shaded with a value based on the maximum predictive value from the LRM PrMax & FPM Q80max. the LRM is shaded one direction while the FPM is perpenicular. This could possibly be used for evaluating other lines (eco/human) of evidence.

Jay, Rob and I are going to incorporate our weighting scheme for predictive tox models & bioassay data into this grid (actually a very similar grid but using the revised shoreline +13 NAVD88 that LWG is currently using) and use this to evaluate data gaps.

We'd like to follow up and talk with you on about this piece-

Thanks!

Ben

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----- Message from Benjamin Shorr <Benjamin.Shorr@noaa.gov> on Wed, 14 Mar 2007 08:12:45 -0800 -----

To: Robert Neely <Robert.Neely@noaa.gov>, Jay Field <Jay.Field@noaa.gov>

cc: Mary Baker <Mary.Baker@noaa.gov>

Subject first cut at spatial/graphical depiction of benthic risk
:

This doesn't incorporate our weighting scheme- simply depicting LRM/FPM & Toxicity on top of grid- also overlaying LWG benthic toxicity iAOPCs.
Attached excel contains draft weighting scheme.

BS

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http://response.restoration.noaa.gov/orr_about.php(See attached file:
benthic_series_070314.pdf)(See attached file:
PH_benthic_weight_070314.xls)

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